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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT PAPER NUMBER

2653

DATE MAILED: 11/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/664,360

Applicant(s)

ROH, JIN-TAE

Examiner

Aristotelis M Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 13-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-12 and 22-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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#### **DETAILED ACTION**

**Applicant's communication of 8/13/04 requesting a restart of the period due to a preliminary amendment duly filed (6/10/04) but not considered prior to the previous OA has been considered with the following results. The previous OA is withdrawn and the following action is made. The period to respond commences with the period set in this communication. The examiner regrets any inconvenience to applicant.**

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

Figures 1-9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Applicant's election with traverse of Group II in the reply filed on 4/2/04 is acknowledged. The traversal is on the ground(s) that the examiner has failed to comply with MPEP§802.01 in that the examiner has failed to provide appropriate support for BOTH INDEPENDENT AND DISTINCT as so required. This is not found persuasive because such is not the requirement of the above noted MPEP section, rather it is either independent or distinct and since the examiner has, as acknowledged by applicant, provided support for distinct the requirement has been established.

The requirement is still deemed proper and is therefore made FINAL.

The previous requirement is further amended to include newly introduced claims 22-35 to Group II as further elaborated upon by applicant.

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Claims 1-3, 13-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/2/04.

Claims 4-12, 22-35 are pending and the following action on the merits is taken.

***Claim Objections***

Claims 30, 31 and 32 are objected to because of the following informalities: The claims do not read in idiomatic English. Dependent claim 32 fails to clarify the above and falls as well. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 4-12, 22-33, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi.

Claims 4, 22 and 28 are method claims drawn to overlapping subject matter.

Claim 4 contrasts with the limitations of claims 22 and 28 in that the third step is phrased relying upon the terms ... deriving an optimum recording condition ... whereas both independent claims 22 and 28 recite the phrase... determining an optimum recording power.... The examiner equates all these as being the same step/ability because such is all derived from the same source as disclosed and claimed ... "based on reproduction characteristics of the test data". NO patentable distinction is seen between these phrases.

Claim 4 does differ from claims 22 and 28 in that it only recites only a single environment variation as opposed to

I: claim 22 , which recites,

a) the optimum recording power; b) recording speed; and c) write strategy, and,

II: claim 28, which recites, the same three conditions albeit in a variation of phraseology.

Hence the examiner concludes there is NO patentable distinction between independent claims 22 and

28. Applicant's attention is drawn to MPEP § 706.03(k).

Applicant is advised that should claim 22 be found allowable, claim 28 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim.

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Similarly dependent claims 23 and 29, 26 and 33,

THE ANALYSIS IS MADE:

CI 4

Takahashi

Preamble recites "an optimal" method vs.  
Just recording methods in claims 22, and 28

see abstract & fig. 2

Reading step; same in all three claims

see description of step 2 in

Fig. 4 & associated elaboration

Recording test data step: same in claims 22 & 28

see description of step 10 in fig. 4

Deriving optimum recording condition;(cl. 4)  
Determining optimum recording power in claims 22 & 28

see description of step 11 in fig. 4

See the above analysis with respect to the ultimate  
Paragraphs:

Ultimate paragraph in claim 4

see description of step 12 in fig. 4

ultimate paragraph in claim 22 & 28

With respect to recorder id, speed  
and write strategy,

see col. 3, lines 60 plus.

The examiner concludes since write power level is predicated not only upon recorder id, but speed and strategy as well, these abilities are inherently present in the above reference.

It is noted that dependent claim 6 introduces such a limitation into independent claim 4 and hence dependent claim 6/4 is substantially duplicative of independent claims 22 and 28.

If applicant can convince the examiner that such is not the case, i.e., not inherent, then the examiner will present a rejection under 35 USC 103 (a) further relying upon the acknowledged prior art/Kim ('965) with respect to power and speed as well as write strategy.

With respect to claims 5, 31, the examiner interprets the ability of identifying the recorder as also meeting this limitations, identification of a variation in the recorder used.

With respect to claims 6 and 30, because the acknowledged prior art indicates speeds, variations of such are met. Also, such abilities are depicted in Kim, see tables 1 and 2.

With respect to claim 7, the optimum recording power meets such limitation.

With respect to claim 8, toc information is provided.

With respect to claims 9, 23, and 29 such is depicted in the acknowledged prior art/Kim (figure 4b).

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With respect to claim 10, see figures 4a and 4b and the description thereof.

With respect to claim 11, these limitations are the same as provided by the ultimate paragraph in independent claims 22 and 28 (recorder id, optimum power, record speed) and hence is also met. Dependent claim 11/4 is substantially duplicative of independent claims 22 and 28.

With respect to claims 12, 25, such is considered inherently present in the acknowledged prior art, that is, this ability is performed repeatedly an allowable number of times (claim 12), whereas for claim 25, the recording condition data is recorded repeatedly on the area.

With respect to claim 24, a count area is discussed with respect to the acknowledged prior art, hence the examiner concludes that the limitation of claim 24 is so drawn and met accordingly.

With respect to claims 26 and 33, the sync code is considered to be inherently present in the atip data.

With respect to claims 27, 32 and 35, such is considered met by the acknowledged prior art with respect to the discussion of figure 9. Proper identification of such prior art is respectfully requested to complete the search report.

2. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 28 above, and further in view of Hamilton et al.

With respect to claim 34, the examiner interprets such as being a designation, such as a country code, where recording is performed. The ability of having appropriate identification (country codes), in this environment, is taught by the Hamilton et al document, see col. 5 lines 60-65 for instance.

It would have been obvious to modify the base system of Takahashi with the above additional identification, motivation is to provide for a code indicative of place of origin. Such encoding permits a manufacturer to monitor defects when/if reported.

3. Claims 4-11, 22-26, 28-31 and 33 are rejected under 35 U.S.C. 103 (c) as being obvious over Kim further considered with Takahashi.

With respect to claim 4 (methods) the disclosure starting at col. 2 line 21 to col. 7 line 11, and especially the description of figure 6 meet the steps so recited as interpreted by the examiner

With respect to claim 5, the phrase "recording environment" as interpreted by the examiner is met when the varying recording powers are established.

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With respect to claim 6, note the varying speeds indicated in tables 1 and 2.

With respect to claim 7, the optimum recording power meets such limitations.

With respect to claim 8, in the toc, information is provided indicative of the manufacturer, which meets this claim.

With respect to claims 9, note the description of the prior art with respect to figure 4b.

With respect to claim 10, see figures 4a and 4b and the description thereof.

There is no clear depiction in Kim that the information is recorded back onto the disc, but rather onto/into a memory of the controller.

The additional ability for updating of a recording condition and subsequently rerecording it onto the record medium is found in Takahashi.

It would have been obvious to modify the base system of Kim with the above teaching from Takahashi, motivation is to provide for a updated recording condition on the record medium itself, and hence serving as a) either as an additional back up, or b) reducing the system requirements of the controller, i.e., not requiring a separate memory location for updated info.

With respect to claims 11,22 and 28, note that Takahashi et al also discloses the ability of identifying the recorder. Independent method claims 22 and 28 recite the additional recorder id, which is taught by the Takahashi reference.

It would have been obvious to modify the base system of Kim with this additional teaching of having a recorder id also presented/placed upon the record medium so as to further assist the overall operation by providing for identification of the recording mechanism and hence used in subsequent problem solving/identification – i.e., which unit/recorder failed or required additional compensation.

With respect to claim 31, this is similar to the limitation found in claim 5 – see above in this paragraph. No further modification is necessary.

With respect to claim 30, this is the similar limitation as found in claim 6, see the above in this paragraph discussion thereof. No further modification is necessary.

With respect to claims 23 and 29, this is the similar limitation as found in claim 9, see the above in this paragraph discussion thereof. No further modification is necessary.



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With respect to the limitation of claim 24, see the discussion with respect to col. 2 line 21 in Kim.

With respect to claim 25, since the combined reference provide for at least two recording of the recording condition, the limitations of this claim are considered met.

With respect to the limitations of claims 26 and 33, because sync. information is a necessity for the operation of optical discs, the examiner concludes that such a limitation is inherently present in the above combined references.

4 Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 11 above in paragraph 3, and further in view of Miyata.

The ability of recording appropriate information a number of times (hence an allowable number of times of claim 12) is taught by the Miyata reference – see the abstract.

It would have been obvious to modify the base system of references as relied upon above with respect to claim 11 and modify such with the additional teaching from Miyata, motivation is as recognized by Miyata to provide for each data recording area of the record medium *with appropriate one arbitrary area segment*

5 Claims 27, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 22 and 28 above, and further in view of the acknowledged prior art with respect to figures 9 of applicant's disclosure. Proper identification of such prior art is respectfully requested to ensure a complete search.

The examiner interprets the classification data as defined by this claim to be met by the information provided in table 9.

It would have been obvious to modify the base systems as relied upon in paragraph 3 with the additional teaching from the acknowledged prior art, motivation is to provide for additional data relied upon for system performance and hence increase the robustness of the systems accordingly. The provision of this addition data, classification assists the user in subsequent error identification.

6. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claim 28 as stated in paragraph 3 above, and further in view of Hamilton et al.

The examiner interprets the limitation of claim 34 as that of identifying a place of origin, a country code.

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The use of ids for country codes in this environment is well known as taught by Hamilton et al – see col. 5 lines 60-65.

It would have been obvious to modify the base system of references relied upon with respect to claims 28 and modify such to include country code id, motivation is to provide for additional information indicative of place of origin.

2. Claims 4-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to method claim 4 the following comparison is made.

Claim 4	Lee et al
Recording method for optical media	see abstract/title/
Reading step of claims 4	see step 21 in figure 8
Recording step of claims 4	see step 11 in figure 8,
Deriving step of claim 4	see step 23 in figure 8, Or step 40 in figure 9
Ultimate paragraph of claim 4	writing of recorder id And rewriting such in step 50 Of figure 9
Claim 5	see discussion with respect to Recording apparatus
Claim 6	see discussion with respect to

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V1, V2, V3.

Claim 7

Optimum recording power

Claim 8

TOC data inherently provided

Claim 9

Inherently written thereto

Claim 10

yes, data is appropriately

Recorded with optimum values

Claim 11

recorder id and speed provided

**Double Patenting**

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 4,5 and 7 are rejected under the judicially created doctrine of double patenting over claims 1-4 of U. S. Patent No. 6404712 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Claim 1 in the present application varies from the claimed subject matter of claim 1 in the patent notable as follows:

Claim 1 (application)

Claim 1 (patent)

"deriving" an optimum recording condition

step (c)

ultimate paragraph

step (d)

The phraseology used in the above noted application claim with respect to "deriving" is considered merely equivalent phraseology, i.e., no patentable weight is given.

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With respect to the ultimate paragraph, note that as claimed, step (d) recites the ability of performing steps a – c as defined in the claim in a predetermined area, step b therein is a recording step.

The examiner interprets this phraseology as merely an alternative expression claiming the same invention.

With respect to claim 5, see claims 3 & 4, recorder id.

With respect to claim 7, see claim 3.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application, which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

5. Claims 22-24,26, 28-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6404712 in view of Kim.

With respect to claims 22 and 28, the additional ability described in the ultimate paragraphs of these independent claims include:

- a) recording power – already present in the above noted patent, see claim 3 therein,
- b) recorder identification – see claim 4 in the above patent,
- c) recording speed and write strategy – see Kim with respect to his tables for speed and strategies.

It would have been obvious to modify the base system of Lee et al with the above additional teaching from Kim, motivation is to provide for an updateable record medium indicative of associated speed with power level and write strategy to enable easier and correctable actions in the event of rewrites due to variations in environmental conditions during subsequent writing.

With respect to claims 23 and 29, such areas are depicted, identified in Kim.

With respect to the limitation of claim 24, see the discussion with respect to col. 2 line 21 in Kim.

With respect to claims 26 and 33 sync data is inherently provided in the above noted systems and the examiner concludes these limitations as met.

With respect to claim 30, such is considered met by the teachings from Kim, note the various speed designations with respect to tables 1 and 2.

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With respect to claim 31, the recorder id is in claim 4 of the patent.

6. Claim 25 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the above noted claim 22 as stated in paragraph 5 above with the additional teaching from Kuroda – i.e., the ability of providing a repeated recording of the recording condition – i.e., the pca ability as further stated in Kuroda, see abstract for instance.

It would have been obvious to modify the base system as stated above in paragraph 5 with the additional repeated recording ability, motivation is to provide for appropriate power control per sector/track/segment of the information disc.

7. Claims 27, 32 and 35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the above noted claims 22, 31 and 28 as stated in paragraph 5 above with the additional teaching from the acknowledged prior art.

The examiner interprets the depiction of figure 9 in the application as meeting such a limitation, and such is acknowledged prior art.

It would have been obvious to modify the base system as stated above in paragraph 5 with the additional classification identification, motivation is to permit a user to readily determine/detect/identify various classifications (good, bad, etc), of the disc environment, i.e., a more user friendly interfacing ability.

8. Claim 34 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the above noted claim 28 as stated in paragraph 5 above with the additional teaching from Hamilton et al.

The use of ids for country codes in this environment is well known as taught by Hamilton et al – see col. 5 lines 60-65.

It would have been obvious to modify the base system of references relied upon with respect to claims 28 and modify such to include country code id, motivation is to provide for additional information indicative of place of origin.

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**Conclusion**

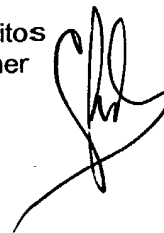
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shaath, identification of the drive, as well as Jaquette et al, see col. 14 lines 40-45..

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M Psitos whose telephone number is (703) 308-1598. The examiner can normally be reached on M-Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psitos  
Primary Examiner  
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AMP